

What is claimed is:

1 ~~1.~~ A method for providing a variable hop cycle
2 beam laydown, the method comprising:

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3         transmitting first downlink beam energy for first
4         cells according to a first hop cycle;

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transmitting second downlink beam energy for
second cells according to a second hop cycle different
than the first hop cycle; and

transmitting transition downlink beam energy for
transition cells according to a transition hop cycle
for transitioning between the first hop cycle and the
second hop cycle.

1 2. The method of claim 1, wherein transmitting
2 first downlink beam energy comprises transmitting
3 downlink beam energy for a first hop pair, wherein
4 transmitting second downlink beam energy comprises
5 transmitting downlink beam energy for a second hop
6 pair, and wherein transmitting transition downlink

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4 beam energy in a second transition cell 25 percent of
5 the time period, and a power gated downlink beam 25
6 percent of the time period.

1 12. The laydown of claim 7, wherein the
2 transition hop cycle comprises downlink beam energy in
3 a first transition cell a first percent of a time
4 period, downlink beam energy in a second transition
5 cell a second percent of the time period, and a power
6 gated downlink beam for a remaining percent of the
7 time period.

1 13. The laydown of claim 7, wherein the first,
2 second, and transition hop cycles comprise downlink
3 beam energy of at least a first frequency and
4 polarization.

1 14. The laydown of claim 7, wherein the first,
2 second, and transition cells are adjacent cells.

1 15. The laydown of claim 7, wherein the first,
2 second, and transition cells are non-adjacent
3 cells.

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22. The apparatus of claim 21, wherein the second hop cycle is a 50-50 hop cycle and wherein the transition hop cycle is a 75-25 hop cycle.

1 23. The apparatus of claim 18, wherein the
2 transition hop cycle specifies transmission of
3 downlink beam energy in a first transition cell a
4 first percent of a time period, specifies downlink
5 beam energy in a second transition cell a second
6 percent of the time period, and specifies a power
7 gated downlink transition beam a remaining percent of
8 the time period.

24. The apparatus of claim 17, wherein at least one of the first cells, second cells, and transition cells are adjacent.

1 25. The apparatus of claim 17, wherein at least
2 one of the first cells, second cells, and transition
3 cells are non-adjacent.

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